



PayPal Holdings Inc

Two-sided network effect getting stronger

UNITED STATES | SERVICES | INITIATION

11 October 2022

BUY (Initiation)

CLOSING PRICE	USD 84.52
FORECAST DIV	USD 0.00
TARGET PRICE	USD 116.00
TOTAL RETURN	37.2%

COMPANY DATA

Bloomberg CODE:	PYPL US
O/S SHARES (MN):	1,156
MARKET CAP (SGD bn / USD bn):	141 / 98
52 - WK HI/LO (USD):	273.51 / 67.58
3M Average Daily T/O (mn):	13.61

MAJOR SHAREHOLDERS

Vanguard Group Inc/The	8.2%
BlackRock Inc	6.6%
State Street Corp	3.8%

PRICE PERFORMANCE (%)

	1MTH	3MTH	YTD
COMPANY	(12.2)	15.1	(55.2)
NASDAQ RETURN	(13.1)	(9.7)	(32.6)

PRICE VS. NASDAQ



KEY FINANCIALS

Y/E Dec, USD (bn)	FY20	FY21	FY22e	FY23e
Revenue	21.5	25.4	28.4	32.6
EBITDA	4.5	5.5	5.3	7.0
PATMI	4.2	4.2	2.2	4.4
PATMI, Adjusted	4.6	5.5	4.5	6.3
EPS	3.5	3.5	1.9	3.9
P/S (X)	4.7	4.0	3.4	2.9
P/E (X) - Adjusted	21.8	18.4	21.5	15.2
ROE	20.9%	19.2%	10.3%	18.3%
ROA	6.0%	5.5%	2.8%	5.4%

Source: Company, PSR

VALUATION METHOD

Discounted Cash-Flow, WACC 7.0%, g 4.0%

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- Total payments volume spiked >3x in last 5 years, with the company adding over 200mn active accounts. Powerful two-sided network effect, increasing digital payments and growth of online shopping to drive revenue growth of 13% over the next 2 years.
- PayPal is a compelling business partner as it boosts conversion rates/sales for merchants. Customers are more likely to complete a purchase when core PayPal checkout is available than those using credit cards due to stored credentials.
- PayPal benefits from newer consumer-to-consumer payment trends through its peer-to-peer (P2P) Venmo payment service. Venmo's total payments volume surged 45% YoY to US\$230.1bn in FY21. Venmo will also be available on Amazon later this year.
- We initiate coverage with a BUY recommendation and DCF-based target price (WACC 7.0%, g 4.0%) of US\$116.

Company Background

Spun off from eBay in July 2015, PayPal Holdings Inc (PYPL) is a global provider of digital and mobile payment solutions. The company's two-sided platform serves nearly 426mn active accounts in over 200 markets. Its payment solutions include PayPal, Venmo, Xoom and Honey. PayPal generates nearly 90% of its total revenues from transaction revenues.

Investment Merits

- PayPal's two-sided network is a key competitive advantage.** PayPal's active accounts grew by 13% YoY to 426mn in FY21, while it added 197mn net new accounts over the last four years. This is mainly due to its two-sided platform that serves both consumers and businesses. This allows PayPal to leverage consumer information to boost sales for merchants by providing shopping deals for its digital wallet users. PayPal's total payments volume (TPV) has also spiked to US\$1.2tn in FY21 from US\$578bn in FY18 due to a larger user base and an increased number of payment transactions. We expect PayPal to continue double-digit revenue growth of 13% over the next 2 years due to network effects and secular trends in the payment industry, including increasing digital payments adoption and the rise of online shopping.
- PayPal helps to boost checkout conversion rates/sales for merchants.** Online merchants witness a higher conversion rate as consumers who choose PayPal Checkout as a payment method are less likely to abandon their cart due to a better buying experience through stored credentials. The company boasts conversion rates of 80%-90% compared to an industry average of ~50%. That value proposition help PayPal to partner with nearly 75% of the top 1,500 retailers in North America and Europe, including Walmart, Shopify, and Booking.com. PayPal also offers working capital loans to its merchants which contributes to increased merchant sales and thereby surge in volume of payments processed. We believe that new products and services such as QR Code payments and Buy Now Pay Later should also help improve checkout conversion for merchants and increase customer engagement with PayPal digital wallet.
- Venmo monetization to support growth.** Initially allowing peer-to-peer (P2P) money transfers with friends and family, Venmo now keeps on adding features to its app. Users can now create business profiles to accept payments, pay for purchases at over 2mn PayPal merchants across the U.S, and buy/sell cryptocurrencies. Venmo's total payments volume surged 45% YoY to US\$230.1bn in FY21. We believe that another significant milestone for Venmo's growth will be its partnership with Amazon, under which Amazon will accept Venmo payments on its platform.

We initiate coverage with a BUY rating. Our target price is US\$116 based on a DCF valuation with a WACC of 7.0% and terminal growth of 4.0%.

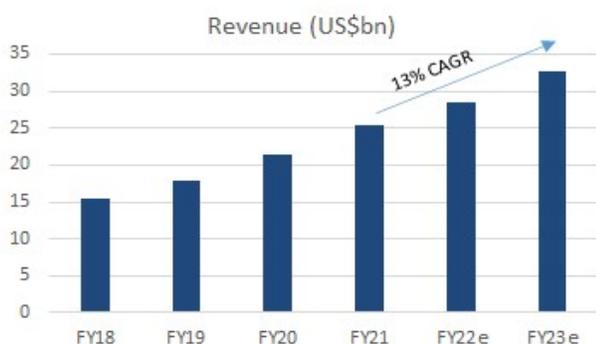
REVENUE

PayPal has two revenue segments: Transaction revenues (92% of FY21 revenues) and revenues from other value-added services (8%). Transaction revenues are generated from fees charged to consumers and merchants based on the total payments volume (TPV). Other value-added services include revenue from subscription fees, partnerships, referral fees, and interest earned on loan receivables or certain customer balances.

Total payments volume (TPV): It is the value of payments (net of reversals) completed on PayPal's platform.

Total revenue expanded at 18% CAGR in the past four years (Figure 1) to US\$25.4bn in FY21. Over FY18-21, PayPal's TPV rose at a CAGR of 29% to US\$1.3tn in FY21 (Figure 2). The growth was mainly driven by the number of active users, merchant acceptance, and the secular shift towards digital payments and e-commerce. PayPal generates revenues from operations in several regions, primarily the US (54% of FY21 revenues) and the UK (9%) (Figure 3).

Figure 1: Revenue expected to grow 13% CAGR between FY21-23



Source: PayPal, PSR

Figure 2: Total payments volume to grow 14% CAGR between FY21-23



Source: PayPal, PSR

RULE OF 40

The "Rule of 40" was first introduced as a benchmark to measure the balance between growth and profitability of SaaS companies, taking into account both revenue growth, as well as profitability (Revenue Growth + EBITDA Margins), with the addition of both metrics needing to exceed the 40% threshold. We have modified this slightly by averaging revenue growth over a 3-year period compared to just a single period growth rate. Adding together PayPal's 3-year average revenue growth of 18% and its adjusted EBITDA margin of 30%, the total of 48% is > than our required threshold of 40%.

EXPENSES

Cost of sales (transaction-related expenses) expanded at a 20% CAGR in the past four years, compared with operating expenses growth of 15%. Operating expenses include customer support and operations (8% of FY21 revenue); sales and marketing (10%); technology and development (12%); and general and administrative (8%). Total operating expenses as a percentage of revenue have reduced from 41% in FY18 to 38% in FY21 (Figure 4).

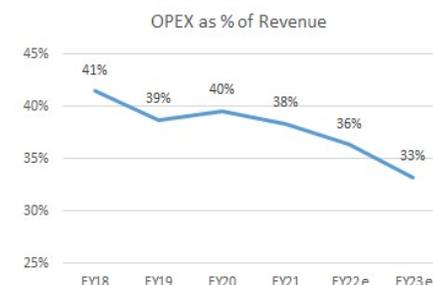
We expect operating expenses as a percentage of revenue to be 36% in FY22e due to cost saving initiatives of around US\$900mn in 2H22e and another US\$1.3bn in FY23e, mainly through layoffs and real estate consolidation. This year, the payments company has already laid off dozens of staff members from its headquarters in San Jose, California.

Figure 3: FY21 Revenue by Region (in %)



Source: PayPal, PSR

Figure 4: PayPal starting to reduce OPEX relative to Revenue



Source: PayPal, PSR

MARGINS

Gross margins have generally remained stable at 55% over the last four years. PayPal’s gross margin is the percentage of revenue it keeps after deducting expenses like volume-based expenses and loan losses. Operating margin in FY21 was 17%, up from 15% the previous year. This has been primarily due to lower transaction and credit losses. We expect operating margin to be 14% in FY22e and 17% in FY23e. The margin reduction in FY22e was mainly due to roll-off of volumes with a higher take rate like eBay’s. eBay has terminated a long-standing relationship with PayPal as its default payments provider and shifted to its own managed payments system.

PayPal recorded net profit margin of 16% for FY21, a decrease from 20% the year before, and this was mainly due to lower net gains on strategic investments. In FY21, Adjusted PATMI grew by 18% YoY to US\$5.5bn, which mainly excludes stock-based compensation expense, amortization of acquired intangible assets, and net gains on strategic investments.

BALANCE SHEET

Assets: In FY21, cash and cash equivalents increased by 8% YoY to US\$5.2bn. Loans and interest receivable accounted for US\$4.8bn (up 75% YoY) of assets in FY21, and are attributed to the merchant receivables under PayPal Working Capital and PayPal Business Loan products as well as consumer loans originated under PayPal Credit and installment credit products. Funds receivable and customer accounts also increased by US\$2.7bn YoY in FY21. PayPal is a relatively asset light business and doesn’t need heavy investments in fixed assets. In FY21, the company reported fixed assets of US\$1.9bn. PayPal’s current ratio for FY21 is 1.2x.

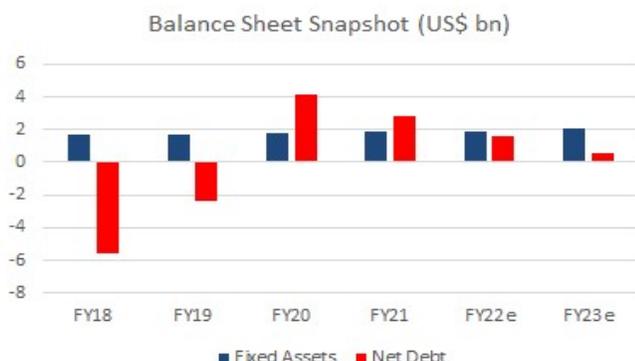
Funds receivable and funds payable: These funds arise due to the time required to initiate collection from and clear transactions through external payment networks. As a result, these funds are classified as receivables or payables until the cash is cleared.

Liabilities: Current liabilities for FY21 were US\$43.0bn, almost US\$4.6bn more than FY20. This increase was mainly due to a rise in funds payable and amounts due to customers. Non-current liabilities saw a drop of US\$822mn in FY21. PayPal had a net debt position of US\$2.9bn in FY21 (Figure 5). PayPal’s debt-to-equity ratio remains low at only 0.4x.

CASH-FLOW

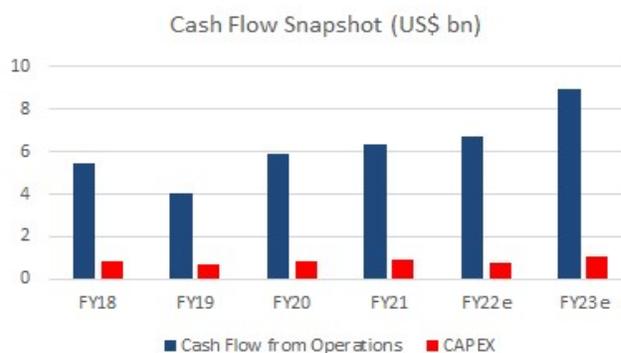
Cash-flow from operations has steadily risen at 26% CAGR to US\$6.3bn (Figure 6) from FY18 to FY21. CAPEX for FY21 was US\$908mn (4% of revenue), a decrease from US\$866mn the previous year. The company generated US\$5.4bn in free cash flow in FY21. This translates to a 21% free cash flow margin.

Figure 5: PayPal has net debt of US\$2.9bn in FY21



Source: PayPal, PSR

Figure 6: Strong operating cash-flows relative to CAPEX



Source: PayPal, PSR

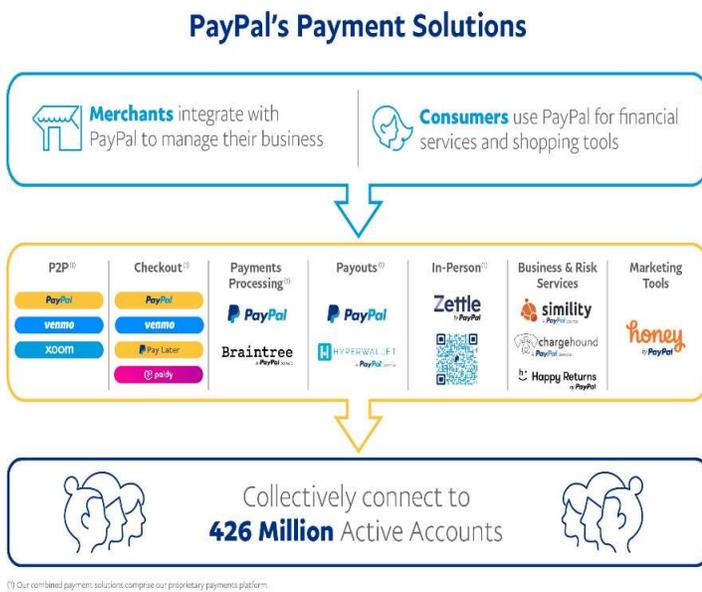
BUSINESS MODEL

PayPal is a leading payments technology platform created to facilitate the processing of online global transactions. Its core product is the PayPal Checkout button (Figure 7). This button is usually found on various e-commerce sites to pay for a product or service. PayPal is one of the most recognized and safest online payment processing service providers.

PayPal is a two-sided platform (Figure 8) that serves both consumers (B2C) and businesses (B2B). The consumer facing aspect of the platform allows one to securely send money to others who have a PayPal account similar to person-to-person (P2P) payment service. On the consumer side, there are no costs unless you link your PayPal transaction to your credit card, debit card, or linked PayPal credit card. PayPal also offers P2P payment solution through Venmo. Venmo also allows users to make purchases at merchants websites. In FY21, Venmo reported a payments volume of US\$230.1bn compared to US\$159bn in FY20. There are various other consumer-facing businesses, including international money transfer service Xoom and rewards platform Honey.

PayPal mainly generates revenue through its business accounts. The company allows merchants on several e-commerce platforms to connect their businesses to PayPal through a business account. When a transaction is completed by PayPal and a merchant sells a product for money, PayPal gets a commission from the merchant after the sale, which is typically 3%-4%.

Figure 7: PayPal's core products and services



Source: PayPal, PSR

Figure 8: PayPal's two-sided network helps grow number of merchants and consumers

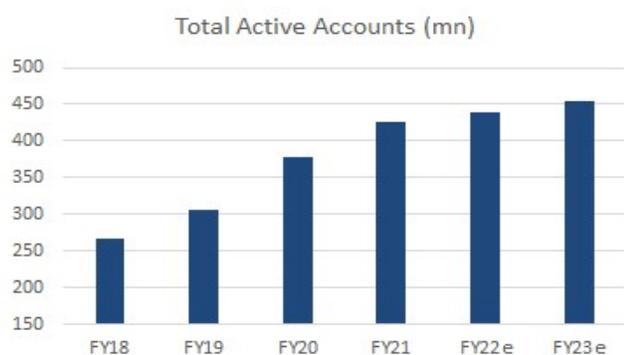


Source: PayPal, PSR

PayPal’s platform services 426mn active accounts (up 13% YoY) consisting of 392mn consumer active accounts and 34mn merchant active accounts (Figure 9). In FY21, the number of transactions per active account went up by 11% YoY to 45x compared with 1% YoY growth in FY20 (Figure 10). We expect PayPal’s number of transactions per active account to grow by 9% in FY22e and 15% in FY23e. This is mainly because the company is now focusing more on user engagement rather than adding more customers. By focusing on user engagement, PayPal can grow its transaction revenue more cost-effectively than spending on advertising to attract new users.

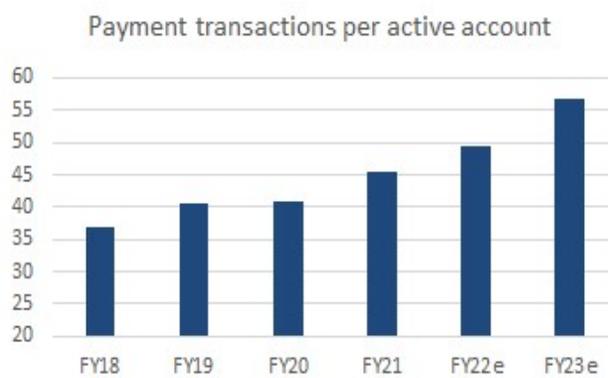
PayPal surpassed US\$1tn (up 33% YoY) in total payments volume (TPV) for the first time in FY21. We expect the TPV to grow by 12% YoY in FY22e and 15% YoY in FY23e driven by growth in digital payments.

Figure 9: Active accounts grew from 267mn in FY18 to 426mn in FY21



Source: PayPal, PSR

Figure 10: Customer engagement has been increasing



Source: PayPal, PSR

PayPal operates as one segment and doesn’t break out its financial performance information into separate reportable segments. However, the fintech company does provide a revenue breakdown into two separate categories: transaction revenues and revenues from other value-added services.

Transaction Revenues (92% of FY21 revenues)

PayPal’s transaction revenues grew 18% YoY to US\$23.4bn in FY21. This segment accounts for over 92% of the company’s total revenues. These are the transaction fees that are charged to consumers and merchants for all the transactions successfully completed on the company’s payment platform. The amount of fees is based on the total payments volume (TPV). The fees are calculated as a percentage; therefore, they will be higher for larger purchases and vice versa.

PayPal also earns fees through currency conversion when making payments in foreign currency. In FY21, the cross-border trade share was 16% of TPV, which was consistent with previous periods. PayPal also charges fees for buying and selling cryptocurrencies and fund transfers from clients’ PayPal or Venmo accounts to their bank accounts or debit cards.

Revenues from other-value added services (8%)

In FY21, PayPal’s revenue from other value-added services increased by 28% YoY to US\$2.0bn, comprising 8% of total revenue. This segment mainly includes revenues generated through referral fees, subscription fees for selected services, interest and fees earned on its loan receivables, as well as revenue share earned through partnerships.

INDUSTRY

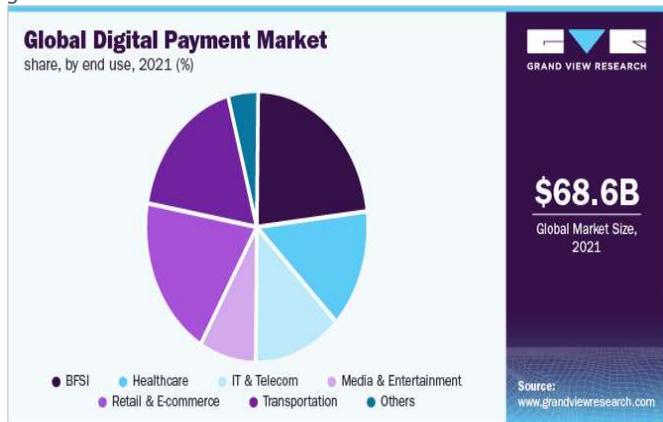
According to Grand View Research, the global digital payment market size, valued at an estimated US\$68.6bn in 2021, is set to reach US\$361.3bn in value by 2030, which indicates a 20.5% CAGR (Figure 11). The US digital experience market size is expected to see a CAGR of 18.2% (Figure 12). One of the key drivers fueling this growth is the surge in customer preference for contactless and real-time payments. Increased adoption of mobile wallets can be attributed to a significant increase in the use of online payments globally.

The digital payment market size is also anticipated to grow due to increase in e-commerce sales. According to Statista, eCommerce will account for 25% of total global retail sales by 2026 compared with 19% in 2021. Global online retail sales are expected to grow from US\$5tn in 2021 to US\$7tn by 2025. The digital payment market will also get a boost from increasing internet penetration and increased support by the government initiatives to digitize payments.

There are various competitors for PayPal. In the digital money transfer space, PayPal competes with Western Union along with traditional bank wire transfers. For digital wallets, PayPal’s Venmo competes with Square Payments, Amazon Pay, Stripe Payments, and Google Pay. Meanwhile, PayPal competes with Square, merchant acquirers, and credit card companies in the payment processing market. According to Statista, PayPal currently holds a 42% market share of the payment processing software technologies worldwide. It is followed by Stripe at 19%, and Shopify Pay Instalments at 12%.

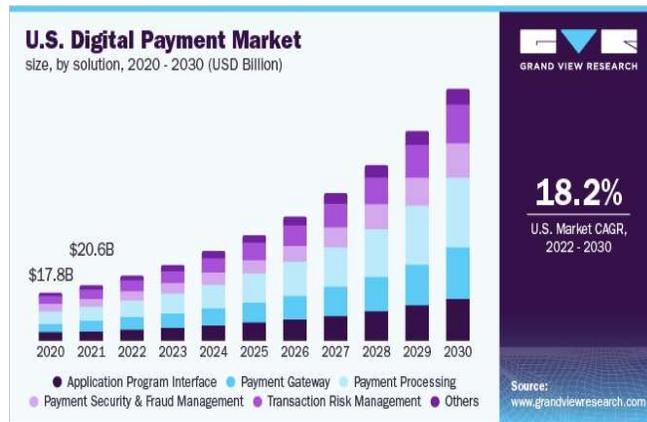
Merchant acquirers: It is the financial institution that allows a merchant to accept credit card payments. These payments are aggregated and separated and sent to card issuers.

Figure 11: Global digital payment market size is expected to grow at 20.5% CAGR



Source: Grand View Research

Figure 12: US digital payment market size is expected to grow at 18.2% CAGR



Source: Grand View Research

RISKS

- 1. Consumer spending and economic growth.** A deterioration in the macroeconomic environment or a sudden surge in the unemployment rate could reduce consumer sentiment and spending, and thereby adversely impact PayPal's revenue growth and profitability.
- 2. Security breaches and system failures.** PayPal’s business operations include storing and transmission of customers’ financial data and ensuring timely payment/receipt of funds. A system breach by hackers or service failures that delayed the transfer of funds could result in significant out-of-pocket costs and customers using the service less frequently.

3. **Significant competition.** PayPal faces competition from several players in the digital finance and payment solution markets, including Apple Pay, Amazon Pay, Visa, and Square. PayPal could lose market share if it's unable to keep up with technology and the pace of innovation within digital payments.

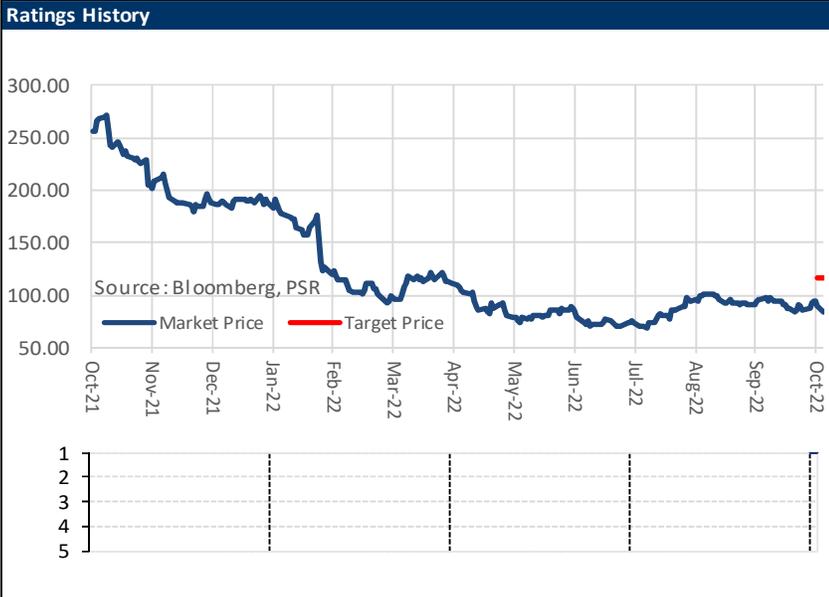
VALUATION

We initiate coverage of PayPal Holdings Inc with a BUY rating and a price target of US\$116.00. Our valuation is based on DCF valuation, using a 7.0% WACC and a 4.0% terminal growth rate (Figure 13).

Figure 13: Our DCF value is US\$116

Valuation	US\$ mn	% of total
NPV FY22-23F	6,328	4.7%
PV Terminal value	1,29,479	95.3%
Enterprise value	1,35,807	
Net debt	(1,563)	
Equity value	1,34,244	
No of shares (mn)	1,156	
DCF value per share	116.00	
EV/EBITDA	25.6	

Source: PSR



PSR Rating System

Total Returns	Recommendation	Rating
> +20%	Buy	1
+5% to +20%	Accumulate	2
-5% to +5%	Neutral	3
-5% to -20%	Reduce	4
< -20%	Sell	5

Remarks

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

Financials

Income Statement

Y/E Dec, USD mn	FY19	FY20	FY21	FY22e	FY23e
Revenue	17,772	21,454	25,371	28,393	32,634
Gross Profit	9,602	11,779	13,996	14,352	16,484
EBITDA	3,631	4,478	5,527	5,312	6,968
Depreciation & Amortization	(912)	(1,189)	(1,265)	(1,269)	(1,321)
EBIT	2,719	3,289	4,262	4,043	5,647
Interest, net	82	(121)	(175)	(175)	(173)
Others	197	1,897	12	(684)	(234)
Profit before tax	2,998	5,065	4,099	3,183	5,241
Income tax (benefit) expense	539	863	(70)	939	839
PATMI	2,459	4,202	4,169	2,244	4,402
PATMI, Adjusted	3,522	4,605	5,455	4,550	6,289

Per share data (USD)

Y/E Dec	FY19	FY20	FY21	FY22e	FY23e
Diluted EPS	2.07	3.54	3.52	1.94	3.89
Diluted EPS, Adjusted	2.96	3.88	4.60	3.93	5.55
DPS	-	-	-	-	-
BVPS	14.25	16.90	18.32	18.77	21.19

Cash Flow

Y/E Dec, USD mn	FY19	FY20	FY21	FY22e	FY23e
CFO					
Profit after tax (GAAP)	2,459	4,202	4,169	2,244	4,402
Adjustments	2,687	2,604	3,273	5,202	5,320
WC Changes	(1,075)	(952)	(1,102)	(758)	(801)
Cash Flow from Operations	4,071	5,854	6,340	6,689	8,921
CFI					
CAPEX, net	(704)	(866)	(908)	(800)	(1,100)
Others	(5,038)	(15,352)	(4,577)	(2,635)	(2,388)
Cash Flow from Investing	(5,742)	(16,218)	(5,485)	(3,435)	(3,488)
CFF					
Borrowings under financing arrangements	5,471	6,966	272	272	272
Others	(1,284)	5,526	(1,036)	(576)	(2,648)
Cash Flow from Financing	4,187	12,492	(764)	(304)	(2,376)
Net Change in Cash	2,510	2,297	(11)	2,949	3,057
CCE, end	15,743	18,040	18,029	20,978	24,036

Source: Company, Phillip Securities Research (Singapore) Estimates

Balance Sheet

Y/E Dec, USD mn	FY19	FY20	FY21	FY22e	FY23e
ASSETS					
Cash & Cash Equivalents	7,349	4,794	5,197	6,397	7,320
Short-term investments	3,412	8,289	4,303	4,303	4,303
Loans and interest receivable	3,972	2,769	4,846	7,256	9,419
Funds receivable and customer accounts	22,527	33,418	36,141	35,948	35,755
Others	1,235	1,725	2,087	2,385	2,721
Total current assets	38,495	50,995	52,574	56,289	59,518
PPE & IA	11,546	18,079	21,492	20,791	20,788
Others	1,292	1,305	1,737	1,737	1,737
Total non-current assets	12,838	19,384	23,229	22,528	22,525
Total Assets	51,333	70,379	75,803	78,817	82,043
LIABILITIES					
Accounts payable	232	252	197	159	115
Funds payable and amounts due to customers	24,527	35,418	38,841	42,413	43,913
Others	2,160	2,777	3,991	3,570	3,149
Total current liabilities	26,919	38,447	43,029	46,142	47,177
LT Debt	4,965	8,939	8,049	7,960	7,871
Others	2,520	2,930	2,998	2,998	2,998
Total non-current liabilities	7,485	11,869	11,047	10,958	10,869
Total liabilities	34,404	50,316	54,076	57,100	58,046
Equity					
Additional paid-in-capital	15,588	16,644	17,208	18,327	19,578
Shareholder Equity	16,929	20,063	21,727	21,718	23,997

Valuation Ratios

Y/E Dec	FY19	FY20	FY21	FY22e	FY23e
P/S (X)	5.6	4.7	4.0	3.4	2.9
P/E (X) - Adjusted	28.5	21.8	18.4	21.5	15.2
P/B (X)	5.9	5.0	4.6	4.5	4.0
EV/EBITDA (X)	27.0	23.3	18.7	18.7	13.8
Growth & Margins					
Growth					
Revenue	15.0%	20.7%	18.3%	11.9%	14.9%
EBITDA	22.3%	23.3%	23.4%	-3.9%	31.2%
EBIT	23.9%	21.0%	29.6%	-5.1%	39.7%
Net profit	19.5%	70.9%	-0.8%	-46.2%	96.2%
Margins					
Gross margin	54.0%	54.9%	55.2%	50.5%	50.5%
EBITDA margin	20.4%	20.9%	21.8%	18.7%	21.4%
EBIT margin	15.3%	15.3%	16.8%	14.2%	17.3%
Net profit margin	13.8%	19.6%	16.4%	7.9%	13.5%
Key Ratios					
ROE	14.5%	20.9%	19.2%	10.3%	18.3%
ROA	4.8%	6.0%	5.5%	2.8%	5.4%
Net Gearing	nm	20.7%	13.1%	7.2%	2.3%
Net Debt/EBITDA (X)	nm	0.9	0.5	0.3	0.1

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